Ref

# OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.,

Secretary to the Commission

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#### **OPINION 323**

Validation and interpretation, under the Plenary Powers, of the specific name angulatus Schlotheim, 1820, as published in the combination Ammonites angulatus for the type species of the genus Schlotheimia Bayle, 1878 (Class Cephalopoda, Order Ammonoidea)



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## INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

### COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 323

#### A. The Officers of the Commission

Honorary Life President: Dr. Karl Jordan (British Museum (Natural History), Zoological Museum, Tring, Herts., England).

President: (Vacant).

Vice-President: Senhor Dr. Afranio do Amaral (Sao Paulo, Brazil).

Secretary: Mr. Francis Hemming (London, England).

#### B. The Members of the Commission

(arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology).

Senhor Dr. Afranio do Amaral (S. Paulo, Brazil) (Vice-President) (1st January 1944).

Professor J. R. Dymond (University of Toronto, Toronto, Canada) (1st January 1944).

Professor J. Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (28th March 1944).

Professor Harold E. Vokes (Johns Hopkins University, Baltimore, Maryland, U.S.A.) (23rd April 1944).

Dr. William Thomas Calman (Coulsdon, Surrey, England) (1st January 1947). Professor Béla Hankó (Békéscsaba, Hungary) (1st January 1947).

Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.) (1st January 1947).

Professor H. Boschma (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands) (1st January 1947).

Senor Dr. Angel Cabrera (Eva Peron, F.C.N.G.R., Argentina) (27th July 1948).

Mr. Francis HEMMING (London, England) (Secretary) (27th July 1948).

Dr. Joseph Pearson (Tasmanian Museum, Hobart, Tasmania, Australia) (27th July 1948).

Dr. Henning Lemche (Universitetets Zoologiske Museum, Copenhagen, Denmark) (27th July 1948).

Professor Teiso Esaki (Kyushu University, Fukuoka, Japan) (17th April 1950).

Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950).

Mr. Norman Denbigh RILEY (British Museum (Natural History), London) (9th June 1950).

Professor Tadeusz Jaczewski (Department of Systematic Zoology, Warsaw University, Warsaw, Poland) (15th June 1950).

Professor Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Frankfurt a. M., Germany) (5th July 1950).

Professor Erich Martin Hering (Zoologisches Museum der Humboldt-Universität zu Berlin, Germany) (5th July 1950).

#### **OPINION 323**

VALIDATION AND INTERPRETATION, UNDER THE PLENARY POWERS, OF THE SPECIFIC NAME "ANGULATUS" SCHLOTHEIM, 1820, AS PUBLISHED IN THE COMBINATION "AMMONITES ANGULATUS" FOR THE TYPE SPECIES OF THE GENUS "SCHLOTHEIMIA" BAYLE, 1878 (CLASS CEPHALOPODA, ORDER AMMONOIDEA)

RULING: (1) Under the Plenary Powers, the specific name angulatus Sowerby (J.), 1815, as published in the combination Ammonites angulatus, is hereby suppressed for the purposes both of the Law of Priority and of the Law of Homonymy, and the specific name angulatus Schlotheim, 1820, as published in the combination Ammonites angulatus, is hereby validated.

- (2) It is hereby directed that the nominal species *Ammonites angulatus* Schlotheim, 1820, is to be interpreted by reference to the lectotype from the Schlotheim collection so selected and figured by Lange in 1951.
- (3) The under-mentioned generic name is hereby placed on the Official List of Generic Names in Zoology as Name No. 769:—Schlotheimia Bayle, 1878 (gender: feminine) (type species, by monotypy: Ammonites angulatus Schlotheim, 1820, as validated, under the Plenary Powers, under (1) above and as interpreted under (2) above).
- (4) The under-mentioned generic name is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology as Name No. 188:—Scamnoceras Lange, 1924 (a junior objective synonym of Schlotheimia Bayle, 1878, as defined under (3) above).

- (5) The under-mentioned specific names are hereby placed on the Official List of Specific Names in Zoology as Name Nos. 203 and 204 respectively: (a) angulatus Schlotheim, 1820, as published in the combination Ammonites angulatus, as validated under the Plenary Powers, under (1) above and as defined under (2) above (specific name of type species of Schlotheimia Bayle, 1878); (b) princeps Buckman, 1923, as published in the combination Schlotheimia princeps.
- (6) The under-mentioned specific name is hereby placed on the *Official Index of Rejected and Invalid Specific Names in Zoology* as Name No. 106:—angulatus Sowerby (J.), 1815, as published in the combination *Ammonites angulatus* and as suppressed, under the Plenary Powers, under (1) above.

#### I.—THE STATEMENT OF THE CASE

The problem represented by the nominal genus *Schlotheimia* Bayle, 1878, was first brought to the attention of the International Commission by Dr. W. J. Arkell (*Sedgwick Museum*, *Cambridge University*, *Cambridge*) in June 1949, and 19th February 1950, Dr. Arkell submitted the following application in regard to it for the consideration of the Commission:—

On the generic names "Schlotheimia" Bayle, 1878, and "Scamnoceras"
Lange, 1924; proposed use of the Plenary Powers to validate the
name "Ammonites angulatus" Schlotheim, 1820 (Class
Cephalopoda, Order Ammonoidea) (Jurassic)

By W. J. ARKELL, M.A., D.Sc., F.R.S. (Sedgwick Museum, Cambridge University, Cambridge)

1. The generic name Schlotheimia was introduced by Bayle in 1878 in the explanation of his pl. 65, fig. 1, in the combination Schlotheimia

angulata Schlotheim. No text was published. In the following year a list of the type species of Bayle's genera was published by H. Douvillé (1879: 91) and in this A. angulatus Schlotheim was categorically stated to be the type species of Schlotheimia Bayle.

- 2. The figure given by Bayle in illustration of this species is commonly believed to differ from *Ammonites angulatus* Schlotheim at least subgenerically. It was therefore renamed *S. princeps* by Buckman (1923: pl. cccxcv, where Bayle's figure is reproduced and labelled "genotype").
- 3. In accordance with the general practice of the 1920s, Bayle's genus was considered to have been based on the material handled by him, and *S. princeps* has been cited as type species of *Schlotheimia* by Buckman (1923, *loc. cit.*), by Spath (1924:197; 1925:201) and by Lange (1925:469). Lange (1924:198) proposed the generic name *Scamnoceras* for *Ammonites angulatus* Schlotheim.
- **4.** The position stated in para. 3 could only be legalised by suspension of the Rules. As the Rules stand, *A. angulatus* Schlotheim, 1820, is the type species of *Schlotheimia* by monotypy, and the generic name *Scamnoceras* Lange, 1924, is an objective synonym of *Schlotheimia* Bayle, 1878.
- 5. The combination *Schlotheimia angulata* had been familiar and had become current in the literature for 45 years before the refinements introduced in the 1920s (see para. 3), and many authors have continued to use it since. So familiar is this combination, and so important the species *A. angulatus* Schlotheim, that a permanent settlement of the question is urgently needed. (See paras. 6 and 7.)
- 6. The zone of Animonites angulatus was set up by Oppel (1856: 14) and has been constantly used in stratigraphical geology ever since. It represents an important series of strata which are developed throughout Europe and also elsewhere. From the geologist's point of view a change of the name of this zone cannot be contemplated.
- 7. The family angulatidae was founded by Hyatt (1874:15) for A. angulatus and its allies, and is still in general use under the corrected name schlotheimidae Spath (1925:201). Schlotheimidae having comparatively recently replaced angulatidae in the literature, it is obviously desirable that the type species of Schlotheimia should be A. angulatus, which was in fact Hyatt's original type although he made a technical error in basing a family upon a species.

- 8. There are, however, the following difficulties in recognising the species A. angulatus Schlotheim and upholding it as the type species of the genus Schlotheimia and thence of the family SCHLOTHEIMIDAE, and as index of the Angulatus Zone. (See paras. 9, 10.)
- 9. Ammonites angulatus Schlotheim (1820:70) was at publication a homonym of A. angulatus J. Sowerby (1815:2:9, pl. cvii, fig. 1), an ammonite described by Sowerby as "a rare and curious specimen", from the Upper Lias and belonging to an entirely different genus (Dactylioceras Hyatt, 1867: p. 95. Type species: A. annulatus Sowerby, selected by Buckman, 1911). There never has been and never can be any risk of confusion, for the two genera belong to different families and the homonymy has not hitherto been noticed. The name Dactylioceras angulatum (Sowerby) is unknown in the literature. Quenstedt (1846:173) considered it a synonym of D. commune (J. Sowerby, 1815) and was probably right.
- 10. A. angulatus Schlotheim (1820: 70) was never figured by its author. Its validity rests on (a) a brief description and localities, and (b) citations of four figures: Scheuchzer, 1718, fig. 50, and Bourget, 1742, figs. 272, 273, 275. Mr. D. T. Donovan points out that all Bourget's three figures are copies of figures in Scheuchzer, and that in particular Bourget's fig. 272 is a copy of Scheuchzer's fig. 50; and that therefore only three figures have to be considered. He also points out that Bourget's figs. 272 and 273 are described in their explanations as having keels, a point evidently not noticed by Schlotheim whose description of A. angulatus specifies that there is no keel or furrow on the venter. These two figures therefore should be ruled out, leaving Bourget's fig. 275 (copied from Scheuchzer's fig. 24) as the only eligible syntype among the cited figures. But, like the figure of the type species of the genus Ammonites Bruguière, this figure is unrecognisable; it could be a Cretaceous Hoplitid.
- 11. A. angulatus Schlotheim therefore must rest solely on Schlotheim's description, supported by his localities. These are "From the neighbourhood of Coburg, from Heinberg and the Bamberg region", and the description which reads "Distinguished from other ammonites by its ribbing, which is strongly developed and joined to make an acute angle on the sharp venter, without any ventral line."
- 12. Schlotheim mentioned that his material consisted of 15 specimens. None of these has since been figured, and the present whereabouts of the collection is unknown. The first author to use Schlotheim's name, however, Quenstedt (1845: 74, pl. iv, fig. 2), consulted the type material, for he wrote "That this alone is Schlotheim's angulatus

is proved by the specimens in Schlotheim's collection in Berlin, and the short but exact description in the Petrifactenkunde, p. 71". It is therefore proposed that Quenstedt's pl. iv, fig. 2c, 2d should be taken as the basis for the recognition of *Ammonites angulatus* Schlotheim. The locality is Bempflingen, Swabia.

- 13. The considerations mentioned in paras. 6 and 7 make this a clear case where it is desirable that the Commission should use its Plenary Powers to set aside an earlier homonym of no use in nomenclature in order to save a later homonym of over a century's standing in the literature and a key name in stratigraphical geology as well as in ammonite systematics. (Cf. Sphaeroceras Bayle dealt with in Commission file Z.N.(S.) 405).<sup>1</sup>
- 14. I accordingly recommend that the International Commission on Zoological Nomenclature should:—
  - (1) use its Plenary Powers :-
    - (a) to suppress for all purposes the trivial name angulatus Sowerby (J.), 1815, as published in the combination Ammonites angulatus;
    - (b) to validate the trivial name angulatus Schlotheim, 1820, as published in the combination Ammonites angulatus;
    - (c) to direct that the trivial name angulatus Schlotheim, 1820, as published in the foregoing combination, is to be applied to the species figured by Quenstedt under the above name in 1845 (Die Cephalopoden) as figs. 2c and 2d on plate iv of the above work;
  - (2) place on the Official List of Generic Names in Zoology the generic name Schlotheimia Bayle, 1878 (gender: feminine) (type species, by monotypy: Ammonites angulatus Schlotheim 1820, validated as in (1)(b), and defined as in (1)(c) above);
  - (3) place the generic name Scamnoceras Lange, 1924, on the Official Index of Rejected and Invalid Generic Names in Zoology;

<sup>&</sup>lt;sup>1</sup> See Opinion 300 (1954, Opinions and Declarations rendered by the International Commission on Zoological Nomenclature 8: 237—248).

- (4) place the under-mentioned specific trivial names on the Official List of Specific Trivial Names in Zoology:—
  - (a) angulatus Schlotheim, 1820, as published in the combination Ammonites angulatus, as validated and defined in (1) above;
  - (b) princeps Buckman, 1923, as published in the combination Schlotheimia princeps;
- (5) place the trivial name angulatus Sowerby (J.), 1815, as published in the combination Ammonities angulatus, on the Official Index of Rejected and Invalid Specific Trivial Names in Zoology.

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- Sowerby, J., 1815. Mineral Conchology, 2:9.
- Spath, L. F., 1924. "The Ammonites of the Blue Lias", Proc. geol. Assoc., 35: 186.
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#### II.—THE SUBSEQUENT HISTORY OF THE CASE

- **2.** Registration of the present application: Upon the receipt of Dr. Arkell's preliminary communication in June 1949, the problem involved in connection with the name *Schlotheimia* Bayle, 1878, was allotted the Registration Number Z.N.(S.) 422.
- 3. Publication of the present application: The present application was sent to the printer in December 1950 and it was published on 4th May 1951 in Triple-Part 6/8 of volume 2 of the *Bulletin of Zoological Nomenclature* (Arkell, 1951, *Bull. zool. Nomencl.* 2:204—207).
- **4.** Issue of Public Notices: Under the revised arrangements prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, Bull. zool. Nomencl. **4**: 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 4th May 1951, both in Triple-Part 6/8 of volume 2 of the Bulletin of Zoological Nomenclature, the Part in which Dr. Arkell's application was published, and also to the other serial publications. In addition, Public Notice was given to certain palaeontological serial publications in Europe and

America. The publication of these Notices elicited no objection to the action proposed.

- 5. Support received for the present application: Support for the present application was received from the following specialists:—(a) Dr. D. T. Donovan (University of Bristol, Department of Geology, Bristol); (b) Dr. Helmut Hölder (Geologisch-Paläontologisches Institut der Universität Tübingen, Germany); (c) the Joint Committee on Zoological Nomenclature for Paleontology in America. The communications so received are given in the immediately following paragraphs.
- 6. Support received from Dr. D. T. Donovan (University of Bristol, Department of Geology, Bristol): On 28th May 1951, Dr. D. T. Donovan (University of Bristol, Department of Geology, Bristol) addressed a letter to the Commission commenting upon a number of applications, including the present one. The following is an extract from the foregoing letter of the passage in which Dr. Donovan indicated his support for the present application (Donovan, 1951, Bull. zool. Nomencl. 2:335—336):—

(2) Page 204. The trivial name angulatus Schlotheim, as published in the binominal combination Ammonites angulatus (Z.N.(S.) 422):—

I agree with the proposal to suppress the trivial name angulatus Sowerby, 1815, as published in the binominal combination Ammonites angulatus, in favour of angulatus Schlotheim, 1820, as published in the same binominal combination, as it will bring the legal position into line with universal usage. Any possible doubt as to the identity of Schlotheim's species has been removed since Dr. Arkell's paragraphs 10—12 were written, by the publication of type material by Lange (1951, Palaeontographica 100 (Abt A): pl. 1, fig. 2 (lectotype), also fig. 6 and pl. 2, fig. 13).

7. Support received from Dr. Helmut Hölder (Geologisch-Paläontologisches Institut der Universität Tübingen, Germany): On 23rd October 1951, Dr. Helmut Hölder (Geologisch-Paläontologisches Institut der Universität Tübingen) submitted a statement through Professor Dr. Robert Mertens (Natur-Museum u. Forschungs-Institut Senckenberg, Senckenberg-Anlage, Frankfurt a. M., Germany) setting out his views on the applications relating to the names of ammonites submitted by Dr. Arkell which had been published in Triple-Part 6/8 of volume 2 of the Bulletin of Zoological Nomenclature. The following is an extract from Dr. Hölder's communication of the passage in which he indicated his support for the present application:—

Dieser zuletzt genannte Fall liegt bei der Fixierung von Schlotheimia angulata ((10), vgl. Bull. S. 206) durch Quenstedt 1845—49, Taf. 4, Fig. 2c u. d vor. Denn hier ist der Anschluss an die Absicht des Autors Schlotheim durch Quenstedt's Kenntnis der Schlotheim'schen Sammlung und den ausdrücklichen Hinweis auf die Stücke dieser Sammlung gewährleistet. Trotzdem könnte auch hier ein Zusatz wie "Schlotheimia angulata Schloth. I.C. 51" eine Erleichterung für den Leser künftiger Publikationen bedeuten.

8. Support received from the Joint Committee on Zoological Nomenclature for Paleontology in America: On 9th April 1952 there was received a large number of letters commenting on various applications previously published in the Bulletin of Zoological Nomenclature from Professor G. Winston Sinclair (then of the University of Michigan, Ann Arbor, Michigan, U.S.A.), Chairman of the Joint Committee on Zoological Nomenclature for Paleonotology in America. Included among these was a letter, reporting that the members of the Joint Committee supported the present application by six votes to five. The foregoing letter was dated 6th February 1952, and its late receipt was apparently due to a decision to defer the despatch to the Commission of the letters containing comments by members of the Joint Committee until all the letters in question had been prepared. By the date on which this letter was received the Prescribed Period of Public Notice had expired and the Voting Paper (V.P.(52)24) had been prepared. It was therefore impossible to include in that Voting Paper a reference to Professor Sinclair's letter, but, when the Voting Paper was despatched (24th April), a supplementary

sheet containing the particulars furnished by Professor Sinclair was issued to the Members of the Commission, who were thus placed in possession of the views of the members of the Joint Committee at the same time that they received the Voting Paper relating to the present case. The following is the text of Professor Sinclair's letter:—

The Joint Committee on Zoological Nomenclature for Paleontology in America has considered this subject, and I wish to inform you that, being polled, they voted: To support the petition (six):—(1) Katherine V. W. Palmer; (2) Bryan Patterson; (3) Bobb Schaeffer; (4) J. Marvin Weller; (5) John B. Reeside, Jr.; (6) R. C. Moore. To oppose the petition (five):—(1) Don L. Frizzell; (2) A. Myra Keen; (3) Siemon W. Muller; (4) John W. Wells; (5) G. Winston Sinclair.

## III.—THE DECISION OF THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

- 9. Issue of Voting Paper V.P.(52)24: On 24th April 1952 a Voting Paper (V.P.(52)24) was issued in which the Members of the Commission were invited to vote either for, or against, the proposal "relating to the names Schlotheimia Bayle, 1878, and Scamnoceras Lange, 1924, as specified in Points (1) to (5) on page 206 of volume 2 of the Bulletin of Zoological Nomenclature" [i.e. in paragraph 14 of the application reproduced in the first paragraph of the present Opinion].
- 10. The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 24th July 1952.

- 11. Particulars of the Voting on Voting Paper V.P.(52)24: The state of the voting on Voting Paper V.P.(52)24 at the close of the Prescribed Voting Period was as follows:—
  - (a) Affirmative Votes had been given by the following sixteen (16) Commissioners (arranged in the order in which Votes were received):

Calman: Hering; Dymond; Esaki; do Amaral; Hankó; Bonnet; Lemche; Vokes; Cabrera; Pearson; Bradley; Boschma; Mertens; Hemming; Riley;

(b) Negative Vote, one (1):

Stoll:

(c) Voting Paper not returned, one (1):

Jaczewski.

- 12. Declaration of Result of Vote: On 25th July 1952, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(52)24, signed a Certificate that the Votes cast were as set out in paragraph 11 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.
- 13. Selection of a lectotype for "Ammonites angulatus" Schlotheim, 1820, by Lange in 1951: On 18th March 1954, Dr. W. J. Arkell (the applicant in the present case) addressed a letter to the Commission drawing attention to the selection by Lange in 1951 of a specimen of Ammonites angulatus Schlotheim, 1820, from the Schlotheim collection, to be the lectotype of the foregoing species. At the time of the receipt of this letter, the

draft of an *Opinion* giving effect to the Vote on this case by the Commission in 1952 had already been prepared, but Mr. Hemming, as Secretary, took the view that the information so received created a new situation in which it was desirable that a further consultation with the Commission should be held. Accordingly, on 3rd April 1954, Mr. Hemming despatched a memorandum to the Members of the Commission, in which, after recalling the Vote already taken in this case, he proceeded as follows:—

Name of the type species of "Schlotheimia" Bayle, 1878

By FRANCIS HEMMING, C.M.G., C.B.E. (Secretary to the International Commission on Zoological Nomenclature)

(Extract from a memorandum dated 3rd April 1954)

- 4. I have recently been engaged in preparing the Opinion required to give effect to the foregoing decision and I have been in correspondence in regard to it with Dr. Arkell. Dr. Arkell has now informed me that he has learnt of the publication of a paper by Lange (March 1951, Palaeontographica 100 (Abt A): pl. 1, fig. 2) on this subject which appeared after the submission to the Commission of his application, in which Lange (a) figured a specimen of Ammonites angulatus Schlotheim, 1820, from the Schlotheim collection, and (b) designated this specimen to be the lectotype of this nominal species. Dr. Arkell considers that the selection of the above previously unfigured specimen from the Schlotheim collection satisfactorily defines the nominal species Ammonites angulatus Schlotheim and he no longer desires that his proposal that this species should be defined by reference to Quenstedt's figures should be proceeded with, this not now being necessary in view of the discovery of the specimen in the Schlotheim collection and its designation as the lectotype of this species.
- 5. If it had not been for the delay which occurred in the preparation of *Opinions* giving effect to the decisions taken by the Commission in 1952—a delay which in the conditions then obtaining was inevitable

in view of the need for concentrating upon preparations for the Copenhagen meeting—the *Opinion* embodying the Commission's decision in the present case would have been rendered long ago. In view, however, of the fact that the *Opinion* on this case which was recently prepared has not yet been published, it is still possible to modify the Ruling given in it, if this is considered desirable. It is thought that in the circumstances now disclosed, the Commission may take the view that, as the object sought in this application—the obtaining of an authoritative interpretation of the nominal species *Ammonites angulatus* Schlotheim, 1820—is now obtainable by reference to the lectotype which has been selected and in consequence the use of the Plenary Powers is no longer required, it would be better to modify the portion of the previous decision under which those Powers were invoked for this purpose.

- 6. The question now submitted to the Commission is thus:—(1) whether the decision to use the Plenary Powers for the purpose of determining the nominal species Anumonites angulatus Schlotheim, 1820, should be replaced by a decision that the nominal species shall be interpreted by reference to the lectotype selected by Lange in 1951 (this latter decision being one which does not involve the use of the Plenary Powers) or (2) whether the existing decision for the determination of the taxonomic species represented by the foregoing nominal species (i.e. the use of the Plenary Powers to secure that the foregoing nominal species should be interpreted by reference to the figures published by Quenstedt in 1845) shall remain unaltered.
- 14. Issue of Voting Paper V.P.(O.M.)(54)1: Simultaneously with the submission to the Commission on 3rd April 1954 of the memorandum, an extract from which has been given in the immediately preceding paragraph, a Voting Paper (V.P.(O.M.) (54)1) was issued in which the Members of the Commission were invited to vote affirmatively for one or other of the alternatives. The alternatives so submitted were as follows:—

#### ALTERNATIVE "A"

Substitution for the existing decision to use the Plenary Powers (to secure the interpretation of Ammonites angulatus Schlotheim, 1820, by reference to certain figures published by Quenstedt in 1845) of a revised decision that the species Ammonites angulatus Schlotheim, 1820, is to be interpreted by reference to the lectotype from the Schlotheim collection so selected and figured by Lange in 1951.

#### ALTERNATIVE "B"

Retention of the existing decision to use the Plenary Powers to secure the identification of the above species by reference to the figures 2c and 2d on pl. iv of the work by Quenstedt entitled *Die Cephalopoden* published in 1845.

- 15. The Prescribed Voting Period for the Voting on Voting Paper V.P.(O.M.)(54)1: As the foregoing Voting Paper was issued under the One-Month Rule, the Prescribed Voting Period closed on 3rd May 1954.
- 16. Particulars of the Voting on Voting Paper V.P.(O.M.)(54)1: At the close of the Voting Period on 3rd May 1954 the state of the voting on Voting Paper V.P.(O.M.)(54)1 was as follows:—
  - (a) Votes in favour of Alternative "A" (acceptance of Lange's selection of a lectotype for "Ammonites angulatus" Schlotheim, 1820) had been given by the following fifteen (15) Commissioners (arranged in the order in which Votes were received<sup>2</sup>):—

Holthuis; Lemche; Vokes; Hering; Sylvester-Bradley; Bonnet; Mertens; Cabrera; Riley; Stoll; Pearson; Hemming; Jaczewski; Bradley (J.C.); Boschma;

(b) Votes in favour of Alternative "B" (retention of decision to define "Ammonites angulatus" Schlotheim, 1820, by reference to certain figures published by Quenstedt in 1845) had been given by the following two (2) Commissioners (arranged in the order in which votes were received):—

Dymond; Esaki;

(c) Voting Papers not returned, two (2)3:—

do Amaral; Hankó.

<sup>&</sup>lt;sup>2</sup> The following zoologists who were Members of the International Commission at the time of the issue of Voting Paper V.P.(O.M.)(54)1 were not Members of the Commission at the time of the issue of Voting Paper V.P.(52)24:—

Mr. P. C. Sylvester-Bradley (Sheffield University, Sheffield, England)

Dr. L. B. Holthuis (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands).

<sup>&</sup>lt;sup>3</sup> After the close of the Prescribed Voting Period, votes in favour of Alternative "A" were received from Commissioners do Amaral (on 19th May 1954) and Hankó (on 25th May 1954).

- 17. Declaration of Result of Vote on Voting Paper V.P.(O.M.)(54)1: On 4th May 1954, Mr. Hemming, Secretary to the International Commission, as Returning Officer for the vote on Voting Paper V.P.(O.M.)(54)1, signed a Certificate that the votes cast were as set out in paragraph 16 above and declaring that the proposal submitted as Alternative "A" in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.
- 18. On 4th May 1954 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(52)24, as amended by its Vote on Voting Paper V.P.(O.M.)(54)1.
- 19. The following are the original references for the names which appear in the Ruling given in the present *Opinion:*—
- angulatus, Ammonites, Sowerby (J.), 1815, Min. Conch. 2:9, pl. cvii, fig. 1
- angulatus, Ammonites, Schlotheim, 1820, Die Petrefactenk.: 70 princeps, Schlotheimia, Buckman, 1923, Type Ammonites 4: pl. cccxcv
- Scamnoceras Lange, 1924, Jahrb. preuss. geol. Landesanst. 44: 198
- Schlotheimia Bayle, 1878, Explic. Carte géol. France 4 (Atlas): pl. 65, fig. 1
- 20. The following is the reference for the selection of a lectotype for the nominal species *Ammonites angulatus* Schlotheim, 1820, specified in the second paragraph of the Ruling given in the present *Opinion*:—Lange (1951, *Palaeontographica* 100 (Abt A): [123] (=expl. to pl.), pl. 1, fig. 2.
- 21. The application dealt with in the present *Opinion* was published in the *Bulletin of Zoological Nomenclature* prior to the establishment of the *Official List of Family-Group Names in*

Zoology by the Fourteenth International Congress of Zoology, Copenhagen, 1953. It has not been possible since then to deal with this aspect of the present case. This question is, however, now being examined on a separate File to which the Registered Number Z.N.(S.) 864 has been allotted.

- 22. At the time of the submission of the application dealt with in the present *Opinion*, the expression prescribed for the second portion of the binomen which constitutes the scientific name of a species was the expression "trivial name" and the *Official List* reserved for recording such names was styled the *Official List of Specific Trivial Names in Zoology*, the word "trivial" appearing also in the title of the *Official Index* reserved for recording rejected and invalid names of this category. Under a decision taken by the Fourteenth International Congress of Zoology, Copenhagen, 1953, the expression "specific name" was substituted for the expression "trivial name" and corresponding changes were made in the titles of the *Official List* and *Official Index* of such names (1953, *Copenhagen Decisions zool. Nomencl.*: 21). The changes in terminology so adopted have been incorporated in the Ruling given in the present *Opinion*.
- 23. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.
- **24.** The present *Opinion* shall be known as *Opinion* Three Hundred and Twenty-Three (323) of the International Commission on Zoological Nomenclature.

DONE in London, this Fourth day of May, Nineteen Hundred and Fifty-Four.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING